MiniMINC

Personal, versatile, powerful desktop computing at an affordable price.

Affordable, approachable, powerful...

These days a computer is virtually indispensable in the laboratory or office environment. It is likewise true that getting computer time when you need it, and as much as you need, doesn't happen very often. So you twiddle your thumbs, berate the system, and wait. We understand. We also sympathize. In fact almost 20 years ago we introduced the first small computers to put an end to fruitless, frustrating delays while someone else hogged the big system at the comp center.

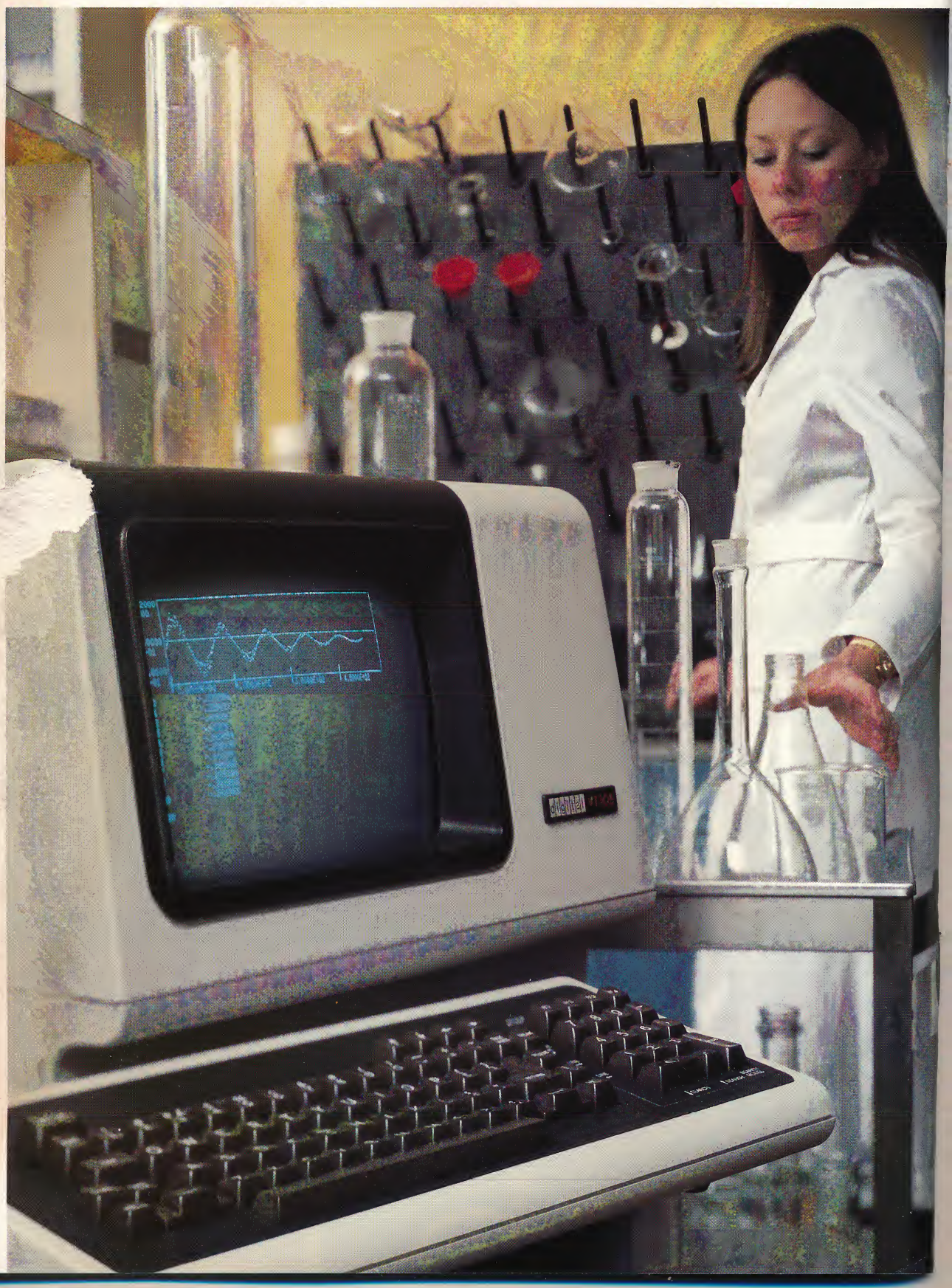
Chances are, you've seen our PDP-8s and PDP-11s somewhere in your travels. Maybe even used one of them in your work. Well, Digital has good news for you. A brand new system that's as approachable and versatile as it is affordable. A system designed specifically as a personal but powerful computer to handle both technical and management computing right in your own laboratory or office. Right at your own bench or desk.

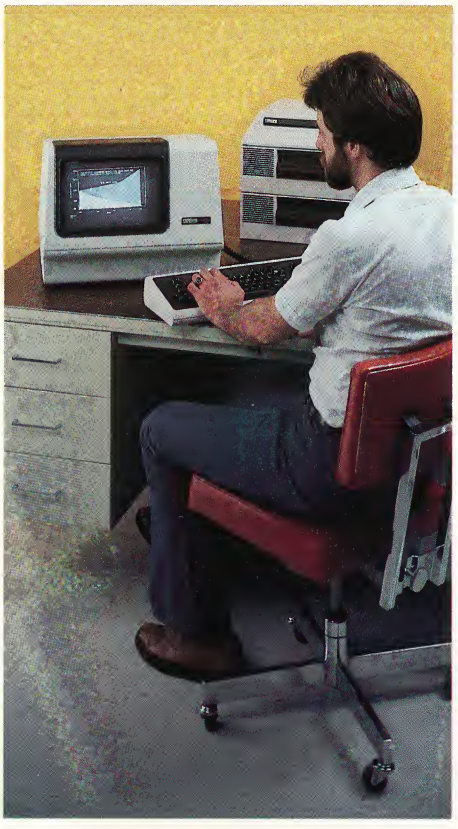
MiniMINC. Newest member of the MINC family. Latest in our long line of innovative, interactive small systems with big capabilities. As easy to use as a calculator but as potent as a minicomputer. And supported by a broad range of high-performance software and clear, concise documentation.

MiniMINC is an innovative. A joy for anyone who calculations even with programming with a few simple commands, monitor experiments, process data, solve problems, plot charts and graphs. Whenever you're computing. No hassles. No charges. Just elbow room.

COPYRIGHT © 1979 DIGITAL EQUIPMENT CORPORATION

Where can you use MiniMINC?





Try computation

Because MiniMINC is a powerful microcomputer, you can use it for a variety of scientific/engineering applications. For example: energy level calculations of atomic orbitals, molecular structure analysis, electronic filter or antenna design, and mechanical stress analyses. What's more, MiniMINC comes with a standard package of 60 math/statistical programs to save you time and effort. But if you like to do your own programming, MiniMINC's conversational enhanced BASIC language keeps it simple.

Or data acquisition

Three programmable serial lines make hooking MiniMINC up to laboratory instruments a snap. Control each line with a few simple BASIC commands. Then use MiniMINC to analyze what you've collected. The system's versatile video display lets you see what's happening while it's happening, and lets you represent results as graphs, histograms, or tabulations.

Or management decision making

With MiniMINC sitting on your desk right now, you could use it to determine your return on investment. Or you can use MiniMINC for cash flow analysis, statistical decision analysis, solving a variety of operations research problems, tracking operating costs, or even keeping your checkbook balanced. The clear, concise documentation delivered with every system simplifies the job of program development for any project.

Or even distributed data processing

Years ago Digital set about countering a tradition that said computers must be large and expensive. MiniMINC is anything but. Small, yet powerful, MiniMINC is priceless, yet inexpensive. In fact, MiniMINC is so easy on budgets, a department or laboratory can easily afford one. And that means freedom from dependence on a remote central system with its slow response times, down-time for maintenance or modification, healthy (or sickening) time charges, limited input formats, and so on.

But, if some of your projects exceed the computational power available from MiniMINC, by tying into the central system, you can have the best of both worlds. Autonomous computing when you want it, the greater power of the host system when you need it, access to all the host's resources. That means, for example, you could collect and preprocess your data locally with MiniMINC, then transmit it via a serial line to the host for final processing and incorporation in a central data base. Or you can have the results sent back to you via the same serial line. Or printed out on your peripheral printer.

What makes MiniMINC run?

Powerful CPU

Tucked inside the MiniMINC floppy disk unit is a powerful 64 Kilobyte, state-of-the-art, PDP-11 microcomputer. Heir to five years of steadily advancing PDP-11 technology, it offers superior versatility and reliability.

Dual floppy disk storage

Able to hold 512 Kilobytes of program, text, and data, dual floppy disk storage is standard with MiniMINC. The industry-standard diskettes are inexpensive, store readily in ordinary file folders, and can be changed in an instant. You can even pop them in the interoffice or regular mail to an associate, a building, a city, or a country away.

Advanced video display

So much for CPU and memory. The MiniMINC CRT is an advanced video display terminal with detached keyboard for comfort and convenience. And as an advanced terminal should, it offers many useful features. For instance: point-plot graphs, histograms with shading and a variable baseline, a strip-chart mode for viewing time-series data, a split screen so you can scroll each half of the screen separately, and the ability to manipulate alphanumeric and graphic elements independently. Simple BASIC commands let you plot data, draw axes and grids, place cursors, label graphs, and perform other operations with ease.

Fingertip control

With MiniMINC, fingertip control is exactly that. Special function keys simplify editing programs, text, or data. With a single key stroke, you can insert, delete, or search for strings of information. With simple BASIC commands, you can set up unique formats for displays, fully control the cursor, switch from normal to reverse video, smooth scroll the screen, set tabs, and put characters into a blinking or bold mode.

Five serial lines

So much for the inside story on MiniMINC. Now the outside story. Here, too, MiniMINC has a lot to offer. Three serial lines to connect instrumentation, plotters, digitizers, and other terminals, one for printers, and one for another computer. Each serial line data rate is programmable to provide the greatest flexibility in configuring interface requirements. High-level BASIC commands provide line control.

Networking

For networking MiniMINC with another computer, one serial line port can be programmed to provide synchronous or asynchronous modem control. In conjunction with MiniMINC's optional DECnet-compatible file transfer software or 2780/3780 communications software, this capability allows you to tap into the additional power of a larger system. And use its other resources as well.

How about MiniMINC software?

MiniMINC may be small but Digital hasn't slighted MiniMINC software. Or its user documentation.

Enhanced BASIC

Standard with MiniMINC is enhanced BASIC, an easy-to-learn, widely known conversational programming language that's easy to use, even if you've never done any programming. That's because MiniMINC's enhanced BASIC offers many powerful special commands that simplify laboratory procedures and graphic representations. As a case in point, by typing in a single command you can acquire data from a serially connected instrument or draw a graph from a data array.

The RT11 software options are recommended only for MINC or DECLAB-11/MNC which have larger storage systems than the MiniMINC.

And should the function of a seldom-used command slip your memory, MiniMINC's HELP capability will automatically display the correct command and statement format. No need to search out your manuals for details.

Also standard with MiniMINC is a package of 60 application programs for numerical, statistical, regression, and financial analyses.

A host of software options

But so much for basics. A host of MiniMINC software options is also available on diskettes, which makes MiniMINC even more flexible and versatile for you. Consider what you could do with the following:

- RT-11 Foreground/Background: a real-time operating system that allows you to run two jobs—including batch processing—at the same time. Almost like having two systems in one.
- MiniMINC Network File Transfer Kit: an easy-to-use subset of DECnet/RT-11 that provides file transfer capability between MiniMINC and other Digital computers.
- 2780/3780 Communications: communications emulator for networking with an IBM host.
- FMS-11: a forms language for developing data entry applications.
- FORTRAN IV: ANSI standard language with laboratory extensions.
- LSP-11: a package of FORTRAN-callable laboratory subroutines for Fast Fourier Transform, auto/cross correlation, power spectrum analysis, and peak/envelope signal processing.
- SSP-11: a package of over 100 FORTRAN-callable math and statistical subroutines.
- Multi-terminal BASIC: supports more than one user simultaneously.
- MACRO: a machine-level assembly language for programming.
- APL: a high-level programming language for arithmetic applications.
- FOCAL: an easy-to-use language similar to BASIC.

Full system documentation

Then, to get you off on the right foot with your MiniMINC—whether you're an expert or novice—we provide a set of four clear, concise manuals which take you step by step through the entire system. The introductory manual gives a system overview, detailed directions for how to use MiniMINC, and a variety of examples. Once acquainted with your system, you can use the second manual to teach yourself programming in BASIC. Next in the series is a reference manual which describes all of the BASIC commands, including examples of their use. The fourth manual details the graphic capabilities of MiniMINC, again with ample illustrations.

And what about MiniMINC peripherals?

Printer options

MiniMINC supports Digital's LA35 and new LA38 30 cps matrix printers as system options. The LA38's contemporary styling makes it an attractive as well as practical addition to your MiniMINC system. It is available with or without a floor stand, and can handle standard computer paper as well as a variety of forms and multiple copy documents.

Graphics peripherals

While Digital does not supply graphics peripherals such as pen plotters, electrostatic plotter/printers or digitizers, these devices are easily interfaced with MiniMINC using one or more of its serial lines.

Digital support

MiniMINC is the finest personal computing system available today in its class and price range. Behind it lie Digital's 21 years of experience in mini- and microcomputer technology. And behind you and your MiniMINC – if ever you need assistance – is Digital's global field support organization of 7000 hardware and software experts. We've designed MiniMINC to provide you with the utmost reliability as well as performance – because we know how important system availability is to your work. But rest assured. If you should encounter a problem, no matter where you are, Digital service is nearby. In addition, a toll-free number is available for application support.

To arrange for a MiniMINC demonstration or to obtain more information, simply contact a Digital sales office, or call our MiniMINC U.S. Information Center, 617-481-9511, extension 6969, or write:

Digital Equipment Corporation
Laboratory Data Products
MR2-4/M16
One Iron Way
Marlboro, MA 01752
Attn: MiniMINC Product Manager

In Europe:

Digital Equipment Corporation
International
European Marketing Group
12, Avenue des Morgines
Case Postale 510
CH 1213 Petit-Lancy 1
Geneva, Switzerland
Attn: MiniMINC Product Manager

digital

No Postage
Necessary
if Mailed in the
United States

BUSINESS REPLY MAIL
FIRST CLASS PERMIT NO. 152 MARLBORO, MA

POSTAGE WILL BE PAID BY ADDRESSEE

Digital Equipment Corporation
Laboratory Data Products MR2-4/M16
One Iron Way
Marlboro, MA 01752

Attn: MiniMINC Product Manager

digital

DIGITAL EQUIPMENT CORPORATION, Corporate Headquarters: Maynard, Massachusetts 01754, Telephone (617) 897-5111—SALES AND SERVICE OFFICES; UNITED STATES—ALABAMA, Birmingham, Huntsville • ARIZONA, Phoenix, Tucson • CALIFORNIA, El Segundo, Oakland, Sacramento, San Diego, San Francisco, Santa Ana, Santa Barbara, Santa Clara • COLORADO, Colorado Springs, Denver • CONNECTICUT, Fairfield, Meriden • FLORIDA, Miami, Orlando, Tampa • GEORGIA, Atlanta • HAWAII, Honolulu • ILLINOIS, Chicago, Peoria, Rolling Meadows • INDIANA, Indianapolis • IOWA, Bettendorf • KENTUCKY, Louisville • LOUISIANA, New Orleans • MARYLAND, Baltimore, Odenton • MASSACHUSETTS, Boston, Springfield, Waltham • MICHIGAN, Detroit • MINNESOTA, Minneapolis • MISSOURI, Kansas City, St. Louis • NEBRASKA, Omaha • NEW HAMPSHIRE, Manchester • NEW JERSEY, Cherry Hill, Fairfield, Princeton, Somerset • NEW MEXICO, Albuquerque, Los Alamos • NEW YORK, Albany, Buffalo, Long Island, Manhattan, Rochester, Syracuse, Westchester • NORTH CAROLINA, Chapel Hill, Charlotte • OHIO, Cincinnati, Cleveland, Columbus, Dayton • OKLAHOMA, Tulsa • OREGON, Portland • PENNSYLVANIA, Allentown, Harrisburg, Philadelphia, Pittsburgh • RHODE ISLAND, Providence • SOUTH CAROLINA, Columbia • TENNESSEE, Knoxville, Nashville • TEXAS, Austin, Dallas, El Paso, Houston • UTAH, Salt Lake City • VERMONT, Burlington • VIRGINIA, Richmond • WASHINGTON, Seattle • WASHINGTON, D.C. • WEST VIRGINIA, Charleston • WISCONSIN, Milwaukee • INTERNATIONAL—ARGENTINA, Buenos Aires • AUSTRALIA, Adelaide, Brisbane, Canberra, Darwin, Hobart, Melbourne, Perth, Sydney, Tasmania, Townsville • AUSTRIA, Vienna • BELGIUM, Brussels • BOLIVIA, La Paz • BRAZIL, Rio de Janeiro, Sao Paulo • CANADA, Calgary, Edmonton, Halifax, Kanata, London, Montreal, Ottawa, Quebec City, Toronto, Vancouver, Winnipeg • CHILE, Santiago • DENMARK, Copenhagen • EGYPT, Cairo • FINLAND, Helsinki • FRANCE, Lyon, Marseille, Paris, Puteaux • HONG KONG • INDIA, Bombay • IRAN, Tehran • IRELAND, Dublin • ISRAEL, Tel Aviv • ITALY, Milan, Rome, Turin • JAPAN, Osaka, Tokyo • MEXICO, Mexico City • NETHERLANDS, Amsterdam, Hague, Utrecht • NEW ZEALAND, Auckland, Christchurch, Wellington • NORTHERN IRELAND, Belfast • NORWAY, Oslo • PERU, Lima • PUERTO RICO, San Juan • SAUDI ARABIA, Jeddah • SCOTLAND, Edinburgh • SINGAPORE • SOUTH KOREA, Seoul • SPAIN, Madrid • SWEDEN, Gothenburg, Stockholm • SWITZERLAND, Geneva, Zurich • TAIWAN, Taoyuan • UNITED KINGDOM, Birmingham, Bristol, Ealing, Epsom, Leeds, Leicester, London, Manchester, Reading, Welwyn • VENEZUELA, Caracas • WEST GERMANY, Berlin, Cologne, Frankfurt, Hamburg, Hannover, Munich, Nurnberg, Stuttgart • YUGOSLAVIA, Ljubljana •

PRINTED IN U.S.A. EK-17022-50/70-000-1K-C